

Title (en)
GRAY CAST IRON FOR CYLINDER HEADS

Title (de)
GRAUGUSSEISEN FÜR ZYLINDERKÖPFE

Title (fr)
FONTE GRISE POUR CULASSES DE CYLINDRE

Publication
EP 1456520 A4 20051019 (EN)

Application
EP 02792399 A 20021213

Priority
• US 0240066 W 20021213
• US 2707101 A 20011220

Abstract (en)
[origin: US2003116113A1] A method of casting parts with gray iron includes the steps of providing molten gray iron metal with controlled carbon, silicon, phosphorous, sulfur, manganese and chromium content; alloying said molten gray iron metal, prior to pouring, with tin to a total tin content of about 0.05% to about 0.10%; inoculating said molten tin-alloyed gray iron metal, prior to pouring, with a gray iron inoculant to an additional silicon addition of from about 0.10% to about 0.12%; and casting the gray iron part from said molten, tin-alloyed inoculated gray iron metal as soon as possible after said inoculation.

IPC 1-7
F02F 7/00; **C22C 37/10**; **C21C 1/08**

IPC 8 full level
F02F 1/00 (2006.01); **B22D 1/00** (2006.01); **C21C 1/08** (2006.01); **C22C 33/08** (2006.01); **C22C 37/06** (2006.01); **C22C 37/10** (2006.01); **F02F 1/24** (2006.01); **F02F 7/00** (2006.01)

CPC (source: EP KR US)
B22D 27/00 (2013.01 - KR); **C21C 1/08** (2013.01 - EP US); **C22C 33/08** (2013.01 - EP US); **C22C 37/06** (2013.01 - KR); **C22C 37/10** (2013.01 - EP US); **F02F 7/00** (2013.01 - KR); **F02F 7/0085** (2013.01 - EP US); **F05C 2201/0439** (2013.01 - EP US)

Citation (search report)
• [A] US 5948353 A 19990907 - LAWRENCE GARTH [US], et al
• [A] US 5580401 A 19961203 - WILLIAMSON WARREN G [US]
• [A] DE 3139973 A1 19830428 - VOLKSWAGENWERK AG [DE]
• See references of WO 03054372A1

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US 2003116113 A1 20030626; **US 6973954 B2 20051213**; AU 2002357856 A1 20030709; BR 0215004 A 20041109; BR PI0215004 B1 20160913; CA 2469536 A1 20030703; CA 2469536 C 20091124; CN 100572785 C 20091223; CN 1606656 A 20050413; EP 1456520 A1 20040915; EP 1456520 A4 20051019; JP 2005513268 A 20050512; JP 5085839 B2 20121128; KR 101024150 B1 20110322; KR 20040066923 A 20040727; MX PA04005128 A 20050425; WO 03054372 A1 20030703; WO 03054372 A8 20040205

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